AMENDMENTS TO THE CLAIMS

1.   (Previously presented)   A method for correcting a defective pixel of a solid-state image sensor having a structure in which a large number of pixel cells each comprised of a combination of a main photosensitive pixel having high sensitivity and a subsidiary photosensitive pixel having low sensitivity are arranged according to a predetermined arrangement form, and a signal according to a signal charge photoelectrically converted with the main photosensitive pixel and a signal according to a signal charge photoelectrically converted with the subsidiary photosensitive pixel are selectively fetched, the method comprising the steps of:

if for any cell of the solid-state image sensor, the main photosensitive pixel constituting the pixel cell is a normal pixel, and the subsidiary photosensitive pixel is a defective pixel, then determining whether or not the level of a signal obtained from a main photosensitive pixel of a pixel cell existing around the pixel cell including the defective subsidiary photosensitive pixel is lower than a predetermined saturation level indicating a saturated output; and

if the level of the signal obtained from the main photosensitive pixel of the pixel cell existing around the pixel cell including the defective pixel is lower than the saturation level, then correcting the pixel value of the defective subsidiary photosensitive pixel according to the pixel value of the main photosensitive pixel in the pixel cell identical to that of the defective photosensitive pixel.

2.   (Original)   The method as defined in claim 1, wherein for any pixel cell of the solid-state image sensor, if the main photosensitive pixel constituting the pixel cell is a defective pixel,

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then the pixel value of the defective main photosensitive pixel is corrected according to the pixel values of main photosensitive pixels of pixel cells existing around the pixel cell including the defective main photosensitive pixel.

3.   (Original)   The method as defined in claim 1, wherein for any pixel cell of the solid-state image sensor, if the main photosensitive pixel constituting the pixel cell is a defective pixel, and the subsidiary photosensitive pixel is a normal pixel, then the pixel value of the defective main photosensitive pixel is corrected according to the pixel value of the subsidiary photosensitive pixel in the pixel cell identical to that of the defective main photosensitive pixel if the level of the signal obtained from the main photosensitive pixel of the pixel cell existing around the pixel cell including the defective main photosensitive pixel exceeds a predetermined criterion.

4.   (Original)   The method as defined in claim 3, wherein the pixel value of the defective main photosensitive pixel is determined by performing computation of multiplying the pixel value of the subsidiary photosensitive pixel in the pixel cell identical to that of the defective main photosensitive pixel by a ratio of the sensitivity of the main photosensitive pixel to the sensitivity of the subsidiary photosensitive pixel.

5.   (Original)   The method as defined in claim 1, wherein the pixel value of the defective subsidiary photosensitive pixel is determined by performing computation of dividing the pixel

value of the main photosensitive pixel in the pixel cell identical to that of the defective subsidiary photosensitive pixel by a ratio of the sensitivity of the main photosensitive pixel to the sensitivity of the subsidiary photosensitive pixel.

6.   (Original)   The method as defined in claim 5, wherein for any pixel cell of the solid-state image sensor, if the main photosensitive pixel constituting the pixel cell is a defective pixel, then the pixel value of the defective main photosensitive pixel is corrected according to the pixel values of main photosensitive pixels of pixel cells existing around the pixel cell including the defective main photosensitive pixel.

7.   (Original)   The method as defined in claim 5, wherein for any pixel cell of the solid-state image sensor, if the main photosensitive pixel constituting the pixel cell is a defective pixel, and the subsidiary photosensitive pixel is a normal pixel, then the pixel value of the defective main photosensitive pixel is corrected according to the pixel value of the subsidiary photosensitive pixel in the pixel cell identical to that of the defective main photosensitive pixel if the level of the signal obtained from the main photosensitive pixel of the pixel cell existing around the pixel cell including the defective main photosensitive pixel exceeds a predetermined criterion.

8.   (Original)   The method as defined in claim 7, wherein the pixel value of the defective main photosensitive pixel is determined by performing computation of multiplying the pixel

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value of the subsidiary photosensitive pixel in the pixel cell identical to that of the defective main

photosensitive pixel by a ratio of the sensitivity of the main photosensitive pixel to the sensitivity

of the subsidiary photosensitive pixel.

9.   (Currently amended) An imaging apparatus comprising:

a solid-state image sensor having a structure in which a large number of pixel cells each

comprised of a combination of a main photosensitive pixel having a relatively large area high

sensitivity and a subsidiary photosensitive pixel having a relatively small area low sensitivity are

arranged according to a predetermined arrangement form, and a signal according to a signal

charge photoelectrically converted with the main photosensitive pixel and a signal according to a

signal charge photoelectrically converted with the subsidiary photosensitive pixel are selectively

fetched;

a determination device which determines whether or not the level of a signal obtained

from a main photosensitive pixel of a pixel cell existing around the pixel cell including the

defective subsidiary photosensitive pixel is lower than a predetermined saturation level

indicating a saturated output if the main photosensitive pixel constituting the pixel cell is a

normal pixel and the subsidiary photosensitive pixel is a defective pixel for any pixel cell of the

solid-state image sensor; and

a defective pixel correcting device which corrects the pixel value of the defective

subsidiary photosensitive pixel according to the pixel value of the main photosensitive pixel in

the pixel cell identical to that of the defective subsidiary photosensitive pixel if it is determined

by the determination device that the level of the signal obtained from the main photosensitive

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pixel of the pixel cell existing around the pixel cell including the defective pixel is lower than the saturation level.

10.   (Original)   The imaging apparatus as defined in claim 9, wherein color filters of same color components are placed for the main photosensitive pixel and the subsidiary photosensitive pixel in the same pixel cell, and one micro-lens is provided for one pixel cell above each pixel cell.

Claims 11-13. (Cancelled)

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